

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PETROGRAPHIC AND CHEMICAL DATA ON MESOZOIC GRANITIC ROCKS OF THE
EAGLE QUADRANGLE, ALASKA

By

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This report is preliminary
and has not been edited or
reviewed for conformity with
Geological Survey standards
and nomenclature

Introduction

The Eagle quadrangle (index map, bottom of plate 1), located in the northeastern part of the Yukon-Tanana Upland of east-central Alaska, is underlain by a complex assemblage of igneous and metamorphic rocks (Foster, 1976). The igneous rocks include an abundance of Mesozoic granitic plutonic rocks which intrude a greenschist to amphibolite facies terrane consisting of quartzite, schist, gneiss, and marble of uncertain (Paleozoic?) age. The plutons are generally homogeneous and lack internal directional fabric. Their compositions range from pyroxenite and hornblendite to granite, but rocks more mafic than quartz diorite are excluded from this report as are dike rocks.

Little published data are available for comparing these granitic rocks with those elsewhere, particularly in other parts of Alaska and in Canada. Results of petrographic and chemical analyses are presented in this report to provide a data base for characterizing the Mesozoic-granitic plutons and for making regional comparison.

Field data were collected during the course of reconnaissance geologic mapping of the Eagle quadrangle from 1963 to 1971 (Foster, 1976). Assistance on this project was given in the field by T. E. C. Keith (1964, 1966, 1970), Jo Laird (1969-1970), F. R. Weber (1969-1971), S. H. B. Clark (1968) and Diana Grunig (1971). Laboratory assistance, including point counts for modal analyses and drafting, was given by Phillip Frame, A. M. Cantelow, and S. T. Luthy.

Method of data presentation

The data presented here include 61 modal analyses obtained by point counts on stained slabs (table 1), 39 whole rock chemical analyses (table 2), and 289 semiquantitative spectrographic analyses (table 3). Available radiometric age determinations are included in table 1. Comparisons of major element chemistry are shown in ternary plots (figs. 1-4).

To aid the reader in locating the samples described in this report, the granitic rocks are assigned to 14 plutons; pluton number 3 is subdivided into 8 parts, A-H (tables 1, 3; plates 1,2). The subdivisions are not based on petrographic or chemical characteristics but are entirely arbitrary. Because the genetic relationships of the granitic rocks are not yet studied and the plutons are not mapped in detail, some plutons which, for presenting data, are here considered as separate masses; also, some plutons represented as a single body may, in fact, be composite.

The nomenclature and classifications of the granitic rocks (table 1) follows that of the IUGS Subcommission on the Systematics of Igneous Rocks (Streckeisen, 1973).

Chemical data

All but four of the whole rock major element chemical analyses were made by the rapid rock method described by Shapiro (1967) and by the rapid rock method supplemented by atomic absorption (Shapiro and Brannock, 1967). Standard rock analyses (Peck, 1964) were performed on the remainder. The rock analyzed is the freshest available that is considered

characteristic of the major plutons.

The U.S. Geological Survey computer program, "General Rock Norms—Mod 2" (C-128), was used to calculate CIPW norms (table 2) and to produce the ternary diagrams (figs. 1-4). The calculations are explained in the program description (Fitzgibbon, 1969).

Samples analyzed for semiquantitative spectrographic analyses were collected as part of a geochemical sampling program for the Eagle quadrangle, and most of the granitic rock specimens are single grab samples collected for background information. However, a few were collected because of visible sulfides or alteration.

Samples are identified by their field numbers, but on table 3, a computer printout, it has been necessary to abbreviate field numbers by giving only the last digit of the year of collection and omitting "A", which indicates that these samples were collected in Alaska. Where "8" or "9" is the first number in the sample number, the years 1968 or 1969 are indicated. Where "0", "1", or "3" occur as the first number, the samples were collected in 1970, 1971, or 1973, respectively.

Samples were analyzed for thirty elements on a DC-arc emission spectrograph using a six-step semiquantitative method described by Grimes and Marranzino (1968). Because no values were reported for gold and cadmium, these elements are omitted from table 3. However, an atomic absorption spectrophotometric method described by Ward and others (1969) was used to more accurately determine the abundance of gold, and this is reported in the last column of table 3.

For the semiquantitative spectrographic analyses, results are reported as six steps per order of magnitude (1.0, 1.5, 2.0, 3.0, 5.0, and 7.0 or powers of 10 of these numbers). These values are approximate geometric midpoints of the class intervals shown below.

<u>Reported values</u>		<u>Class interval limits</u>		
1.0	-----	0.83	-	1.2
1.5	-----	1.2	-	1.8
2.0	-----	1.8	-	2.6
3.0	-----	2.6	-	3.8
5.0	-----	3.8	-	5.6
7.0	-----	5.6	-	8.3

Spectrographic analytical precision is given by Matooka and Grimes (1976).

Values for Fe, Mg, Ca, and Ti are given in percent. Values for all other elements are given in parts per million. Limits of determination for the semiquantitative spectrographic analyses are as follows:

Fe	0.5	percent	Ba	20 ppm	Mo	5 ppm	V	10 ppm
Mg	.02	percent	Be	1 ppm	Nb	10 ppm	W	50 ppm
Ca	.05	percent	Bi	10 ppm	Ni	5 ppm	Y	10 ppm
Ti	.002	percent	Cd	20 ppm	Pb	10 ppm	Zn	200 ppm
Mn	10	ppm	Co	5 ppm	Sb	100 ppm	Zr	10 ppm
Ag	.5	ppm	Cr	10 ppm	Se	5 ppm		
As	200	ppm	Au	5 ppm	Sn	10 ppm		
B	10	ppm	La	20 ppm	Sr	100 ppm		

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Table 1.

See attached 3 sheets

Table 2.--Major element chemical analyses in weight percent and CIPW normative minerals for 39 granitic rocks of the Eagle Quadrangle, Alaska

Analysts: S. Berthold, S. Botts, L. Shapiro, and H. Smith. *--Indicates standard rock analysis, method described by Peck (1964). All others are rapid rock analyses, method described by Shapiro and Brannock (1967).

FIELD NUMBER	%										*									
	63AFF-2C	64AFF-2	64AFF-70	68AFF-66	68AFF-2038	69Aff-87	69Aff-485	69Aff-674	69Aff-689	69Aff-900	69Aff-901	70Aff-179	70Aff-225							
SiO ₂	58.90	66.51	68.3	64.1	65.7	73.7	59.2	71.2	66.0	65.87	64.78	58.8	66.0							
Al ₂ O ₃	15.17	15.97	15.7	17.1	15.9	14.2	13.6	15.3	16.6	16.72	13.24	15.6	17.1							
Fe ₂ O ₃	1.75	1.08	0.50	2.0	1.1	0.40	2.1	0.30	0.60	1.45	1.75	1.9	1.6							
TiO ₂	5.37	5.19	2.4	2.2	3.2	4.7	1.6	3.1	2.60	5.37	9.7	1.7								
MgO	3.48	1.65	1.2	1.3	1.5	0.32	4.4	0.53	1.5	1.31	3.32	3.7	1.2							
CaO	6.18	4.01	3.0	5.0	4.1	1.2	5.7	1.9	3.5	4.74	5.57	7.1	3.9							
MnO	2.08	2.92	2.9	3.6	2.7	3.0	2.3	3.0	2.9	3.20	2.57	2.8	4.8							
K ₂ O	4.32	3.21	3.3	2.3	2.6	4.1	4.1	3.6	2.9	2.72	4.31	2.6	2.5							
H ₂ O ¹	1.01	0.72	0.94	0.83	0.91	0.75	1.0	0.79	1.1	0.48	0.95	0.73	0.71							
TiO ₂	0.76	0.59	0.47	0.42	0.47	0.10	0.58	0.22	0.52	0.66	0.74	0.65	0.42							
P ₂ O ₅	0.51	0.10	0.15	0.21	0.15	0.05	0.41	0.09	0.17	0.60	0.51	0.36	0.19							
MnO	0.16	0.09	0.07	0.10	0.10	0.05	0.14	0.08	0.08	0.14	0.15	0.14	0.07							
CO ₂	n.d.	0.06	0.01	0.01	0.01	0.01	0.04	0.07	0.08	n.d.	n.d.	0.01	0.05							
sum	99.69	100.04	99	99	99	99	99	99	99	100.99	100.26	99	100							
Q	11.65	24.57	29.9	21.6	27.9	37.2	12.3	34.9	27.2	25.1	14.1	12.4	18.4							
C	0.00	0.65	2.4	0.12	1.6	2.8	0.0	3.4	2.9	1.3	0.0	0.0	0.0							
Or	25.61	18.96	19.7	13.7	15.6	24.4	24.6	21.6	17.3	16.0	25.4	15.5	14.7							
Ab	17.66	24.70	24.8	30.7	23.2	25.6	19.8	26.7	24.8	26.9	21.7	23.9	40.5							
An	19.36	19.23	13.6	23.6	19.6	5.6	14.9	8.5	15.9	19.5	11.8	22.5	17.7							
Wo	3.36	0.00	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	5.2	9.4	0.03						
En	13.69	4.11	3.0	3.3	3.8	0.80	11.2	1.3	3.8	3.2	8.2	9.3	3.0							
Fs	7.48	4.16	3.4	1.9	4.4	1.8	6.3	2.5	4.5	2.7	7.4	6.3	1.2							
Nt	2.55	1.57	0.73	2.9	1.6	0.59	3.1	0.44	0.88	2.1	2.5	2.8	2.3							
Il	1.45	1.12	0.20	0.80	0.9	0.19	1.1	0.42	1.0	1.2	1.4	1.2	0.80							
Ap	1.21	0.24	0.36	0.50	0.36	0.12	0.99	0.22	0.41	1.4	1.2	0.86	0.45							
Ck	0.00	0.00	0.14	0.02	0.02	0.02	0.09	0.09	0.18	0.0	0.0	0.02	0.11							
Di	6.63	0.00	0.00	0.00	0.00	0.00	8.8	0.0	0.0	0.0	10.2	8.6	0.05							
Hy	12.91	8.27	6.4	5.2	6.2	2.6	13.2	3.8	8.3	6.0	10.6	11.4	4.2							
D.T.	54.92	68.23	74.4	66.1	66.7	81.3	56.8	82.1	69.3	68.0	61.2	51.8	73.7							

Table 2.--Major element chemical analyses in weight percent and CIPW normative minerals 2
for 39 granitic rocks of the Eagle Quadrangle, Alaska--Continued

FIELD NUMBER	70 AFF 312	70 AFF 372	70 AFF 431a	70 AFF 458	70 AFF 995	70 AFF 3070	70 AFF 3112	71 AWF 80	71 AWF 90	71 AWF 185	71 AWF 201	71 AWF 341	71 AWF 348
SiO ₂	65.1	74.0	65.1	65.3	63.9	71.6	69.0	68.3	71.2	69.7	66.7	66.2	
Al ₂ O ₃	14.6	14.2	16.8	17.2	17.2	14.7	15.7	15.5	14.9	15.4	15.7	15.5	
Fe ₂ O ₃	1.8	0.28	0.76	0.48	1.9	0.20	0.22	0.50	0.40	0.60	0.80	0.50	1.0
FeO	2.5	0.84	3.4	3.2	2.3	1.6	1.9	2.6	2.9	2.1	2.9	2.7	3.1
MnO	2.1	0.14	1.7	1.3	1.4	0.70	1.1	1.2	0.50	1.1	1.50	1.2	1.5
CaO	4.0	0.84	4.0	3.0	5.7	1.3	2.2	2.9	2.1	2.9	3.50	3.1	3.6
Na ₂ O	3.0	3.1	2.4	2.9	3.6	2.9	2.7	2.6	2.9	2.4	2.40	3.0	2.8
K ₂ O	4.4	4.8	3.7	4.4	4.4	5.3	5.4	4.1	4.2	4.2	3.70	2.5	3.0
H ₂ O +	0.83	0.68	0.89	1.0	0.76	0.62	0.84	1.1	0.76	1.0	0.90	1.0	1.8
TiO ₂	0.44	0.13	0.54	0.66	0.44	0.27	0.39	0.21	0.32	0.49	0.35	0.53	
P ₂ O ₅	0.25	0.13	0.13	0.23	0.25	0.11	0.12	0.11	0.08	0.09	0.14	0.11	0.15
Nd ₂ O	0.08	0.00	0.03	0.05	0.11	0.04	0.00	0.08	0.00	0.07	0.08	0.09	0.10
(D ₂)	0.36	<0.05	<0.05	<0.05	0.07	0.04	<0.05	0.02	0.01	0.07	0.03	0.08	0.06
sum	100	100	100	100	99	99	99	99	100	99	100	99	99
Q	20.3	36.3	24.2	21.9	23.5	30.1	25.6	28.3	32.7	31.1	32.7	32.7	27.2
C	0.0	2.7	1.9	2.79	0.16	2.2	1.7	0.02	2.2	1.5	1.5	2.3	1.6
Or	36.1	25.4	22.	26.1	26.3	31.5	32.1	24.4	25.0	24.9	22.2	14.7	17.9
Ab	25.5	26.2	20.4	24.6	30.7	24.7	23.0	22.1	23.8	20.4	20.6	25.2	23.9
An	13.4	3.26	19.0	13.4	26.4	5.5	10.1	13.6	9.9	13.4	16.5	14.1	16.6
Wo	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
En	5.3	0.35	4.3	3.3	3.5	1.7	2.7	3.0	1.2	2.7	3.8	3.0	3.8
Fs	2.5	1.1	4.8	4.5	2.1	2.4	2.5	3.9	3.0	3.0	4.1	4.1	4.2
Mt	2.4	0.41	1.1	0.70	2.8	0.29	0.32	0.73	0.87	0.87	1.2	0.72	1.4
Tl	0.84	0.25	1.0	1.3	0.84	0.52	0.75	0.75	0.40	0.61	0.92	0.66	1.0
Ap	0.59	0.31	0.55	0.60	0.26	0.29	0.26	0.19	0.21	0.34	0.26	0.36	
Ce	0.92	0.02	0.02	0.02	0.16	0.09	0.02	0.05	0.02	0.16	0.07	0.18	0.14
Di	2.08	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0
H ₄	6.8.	1.45	9.1	7.7	5.7	4.2	5.2	6.9	4.2	5.7	7.9	7.1	8.0
D.I.	72.0	90.9	66.6	72.6	62.6	86.3	80.7	74.8	81.5	76.46	70.1	72.6	69.0

Table 2.--Major element chemical analyses in weight percent and CIPW normative minerals
for 39 granitic rocks of the Eagle Quadrangle, Alaska--Continued

FIELD NUMBER	11Afr 364	11Afr 507	11Afr 635	11Afr 662	11Afr 664	71Afr 701	71Afr 703	71Afr 800	71Afr 2024	71Afr 2025	71Afr 2179	73Afr 3191
SiO ₂	63.2	62.2	60.2	67.5	66.0	63.3	70.4	74.2	68.7	75.2	67.5	65.4
Al ₂ O ₃	17.6	13.5	15.7	15.0	16.2	16.8	15.2	14.1	15.9	13.3	15.2	15.9
Fe ₂ O ₃	0.20	2.0	1.0	1.1	1.3	1.2	0.40	0.30	0.30	0.20	0.60	1.0
FeO	3.4	4.4	4.9	2.3	2.5	3.4	1.0	1.0	1.0	1.0	3.1	3.4
MgO	0.88	3.3	5.2	1.2	1.4	2.4	0.60	0.40	0.70	0.35	1.3	1.7
CaO	5.1	4.6	5.9	3.3	3.5	4.7	2.0	1.6	1.8	1.7	3.5	1.5
Na ₂ O	5.4	2.2	2.1	3.0	3.0	2.4	2.9	3.3	2.2	2.5	2.8	3.2
K ₂ O	2.4	4.0	2.2	2.8	2.8	2.6	4.3	4.2	4.8	9.4	3.2	2.1
H ₂ O ^a	1.2	1.3	1.6	1.0	1.0	1.2	0.99	0.73	1.0	0.40	0.96	1.3
TiO ₂	0.42	0.87	0.69	0.48	0.52	0.40	0.32	0.15	0.33	0.13	0.49	0.49
P ₂ O ₅	0.12	0.34	0.00	0.17	0.18	0.16	0.14	0.04	0.12	0.03	0.12	0.14
MnO	0.09	0.16	0.14	0.08	0.10	0.10	0.05	0.04	0.04	0.02	0.08	0.12
CO ₂	0.01	0.01	0.01	0.01	0.03	0.02	0.03	0.01	0.02	0.02	0.01	0.02
sum	99	100	99	99	99	99	100	100	99	99	99	99
Q	20.4	19.3	16.4	30.1	27.9	24.5	31.5	36.8	36.0	41.3	30.0	27.6
C	0.45	0.0	0.0	2.3	2.4	1.9	2.6	2.0	2.4	2.0	1.60	1.3
Or	14.4	23.9	13.0	16.8	16.8	15.5	25.7	24.9	28.8	26.3	19.2	12.5
Ab	29.1	18.0	17.8	25.7	25.8	20.5	24.8	24.6	28.3	19.0	21.5	23.9
An	24.8	15.3	27.0	15.4	16.2	22.4	9.9	7.6	8.1	8.2	16.8	21.2
Va	0.0	2.3	0.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
En	2.2	0.3	13.0	3.0	3.5	6.0	1.5	1.0	1.8	0.88	3.3	4.3
Fs	5.1	5.3	7.3	2.7	2.9	4.5	2.6	1.4	2.2	1.5	4.6	4.9
Mt	1.3	2.9	1.5	1.6	1.9	1.8	0.59	0.44	0.44	0.29	0.88	1.5
Il	0.81	1.7	1.3	0.92	1.0	1.1	0.61	0.29	0.64	0.25	0.95	0.94
Ap	0.29	0.81	0.0	0.41	0.43	0.38	0.34	0.10	0.29	0.07	0.29	-
Cc	0.02	0.02	0.02	0.02	0.07	0.05	0.07	0.02	0.05	0.05	0.02	0.05
Di	0.0	4.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Hg	7.3	11.5	19.4	5.7	6.4	10.5	4.1	2.4	4.0	2.4	7.9	9.1
D.I.	63.9	62.0	47.3	72.6	70.5	60.6	82.0	86.3	83.1	86.4	70.7	64.1

EXPLANATION OF SYMBOLS

- X - QTZ MONZONITE
- +- QTZ MONZODIORITE
- * - GRANITE
- # - QTZ DIORITE
- O - GRANODIORITE

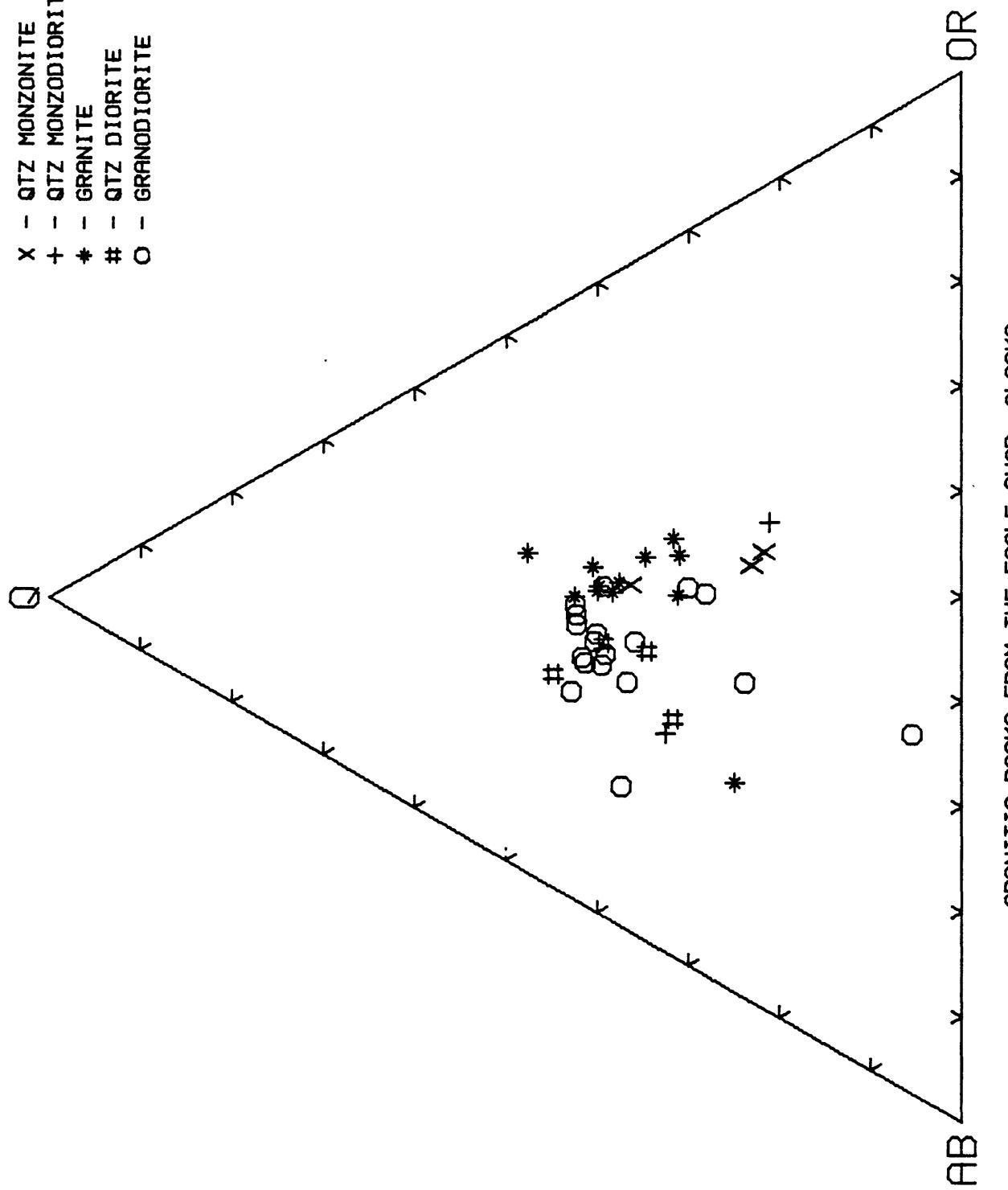


Figure 1.--Normative compositions of 39 granitic rocks from the Eagle quadrangle, Alaska, represented in the ternary system Ab-Or-Q. Major element chemical analyses appear in table 2.

EXPLANATION OF SYMBOLS

- X - QTZ MONZONITE
- + - QTZ MONZODIORITE
- * - GRANITE
- # - QTZ DIORITE
- O - GRANODIORITE

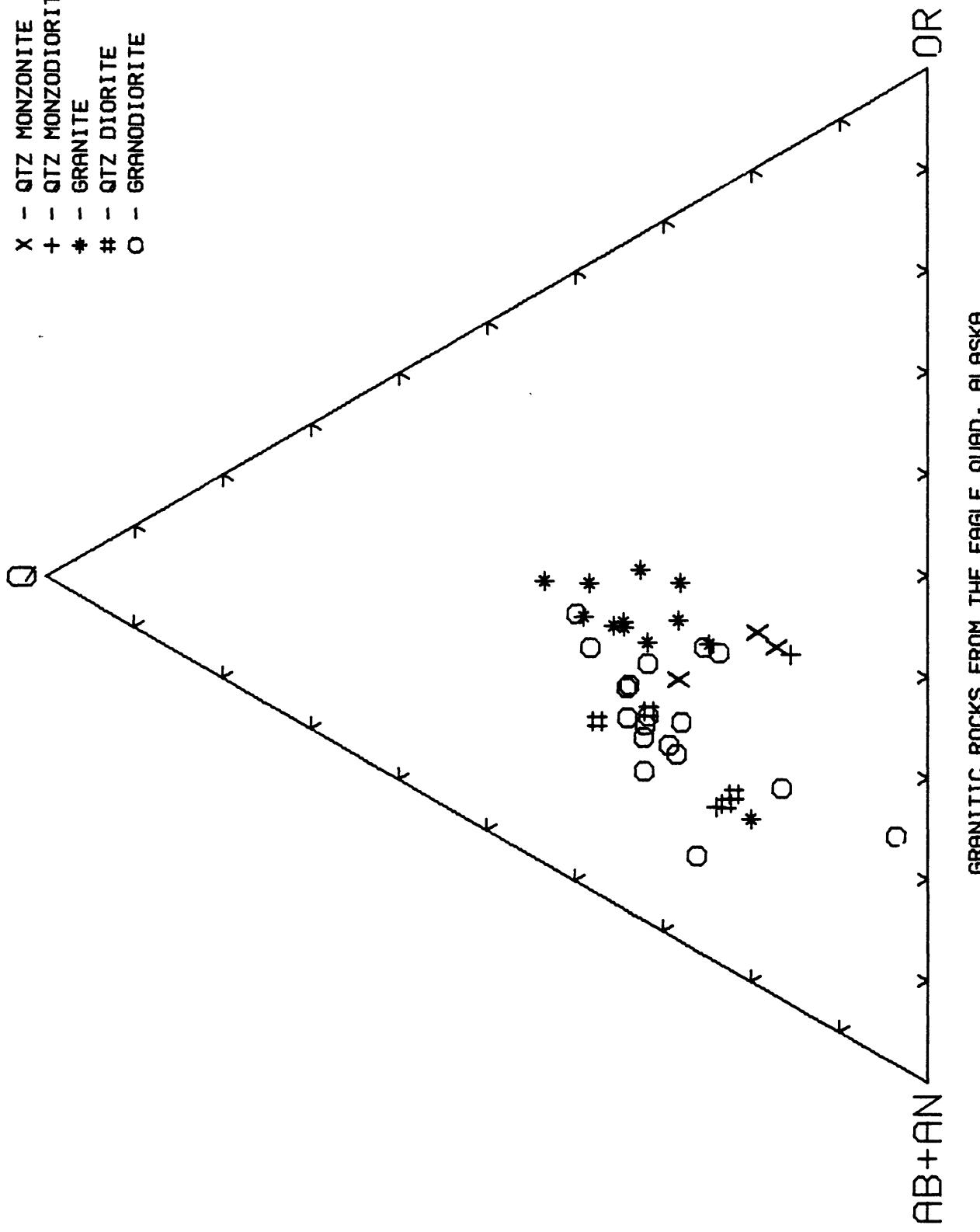


Figure 2.--Normative compositions of 39 granitic rocks from the Eagle quadrangle, Alaska, represented in the ternary system Ab-An-Q-Or. Major element chemical analyses appear in table 2.

EXPLANATION OF SYMBOLS

- X - QTZ MONZONITE
- + - QTZ MONZODIORITE
- * - GRANITE
- # - QTZ DIORITE
- O - GRANODIORITE

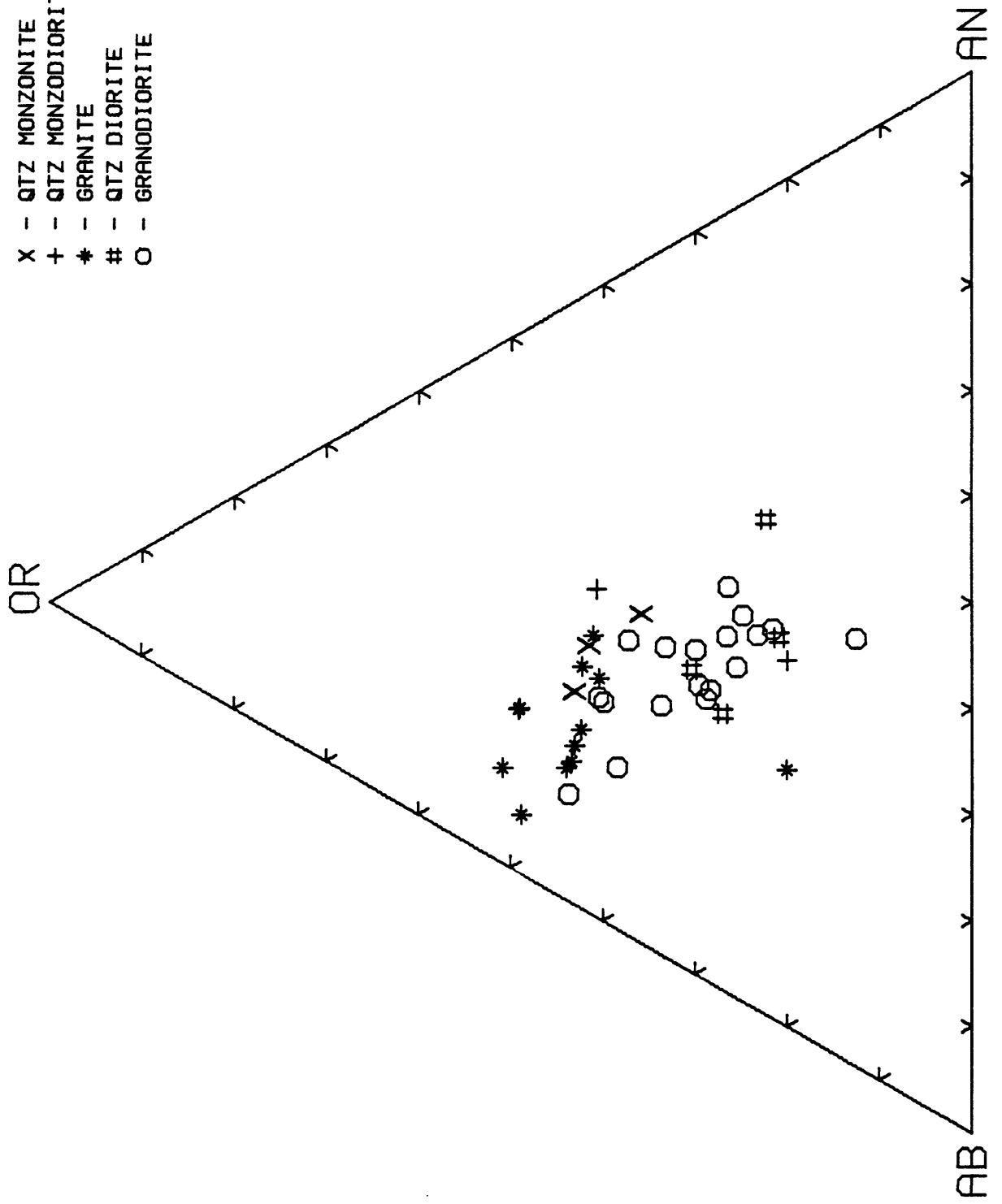
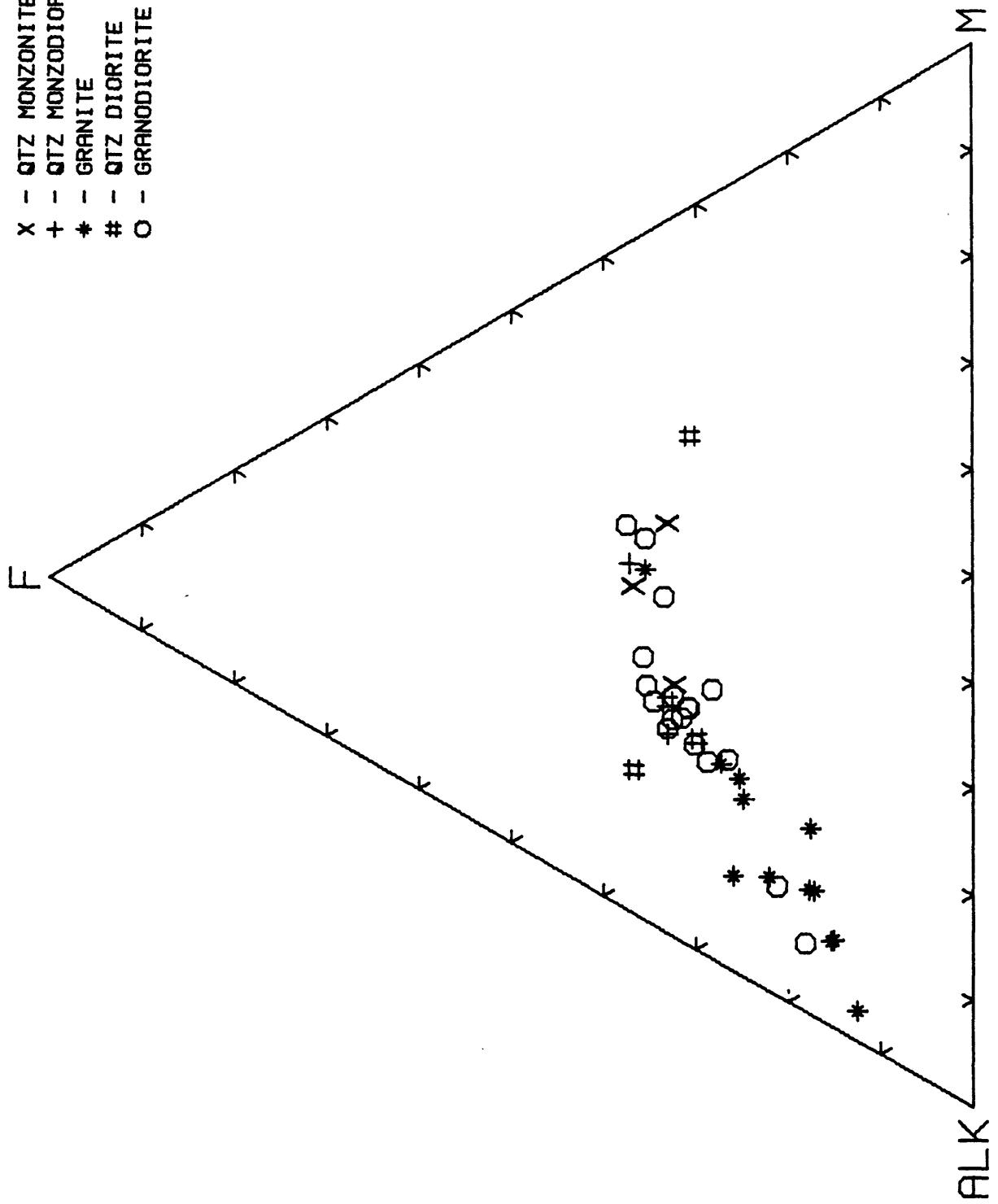


Figure 3.--Normative compositions of 39 granitic rocks from the Eagle quadrangle, Alaska, represented in the ternary system Ab-Or-An. Major element chemical analyses appear in table 2.

EXPLANATION OF SYMBOLS

- X - QTZ MONZONITE
- + - QTZ MONZODIORITE
- * - GRANITE
- # - QTZ DIORITE
- O - GRANODIORITE



GRANITIC ROCKS FROM THE EAGLE QUADRANGLE, ALASKA

Figure 4.--Ternary Alk-F-M diagram for 39 granitic rocks from the Eagle quadrangle, Alaska. Alk = molecular $\text{K}_2\text{O}+\text{Na}_2\text{O}$; F = molecular $\text{FeO}+\text{Fe}_2\text{O}_3$; M = molecular MgO . Major element chemical analyses appear in table 2.

Table 3.—Semi quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska

[Analyses: K. J. Curry, A. L. Meier, R. L. Miller, D. J. Murray, G. W. Day, H. D. King, and R. B. Tripp. "S" before an element indicates analysis by emission spectrography. "AA" before an element indicates analysis by atomic absorption. Analyses given in parts per million for all elements except Fe, Mg, Ca, and Ti, which are given in percent. Zeros to right of decimal point may or may not be significant.]

sample	S-FE%	S-MG%	S-Ca%	S-Ti%	S-Mn	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CO	S-CR	S-CU	S-LA
Pluton no. 1															
8CS296	10.00	5.00	10.00	1.000	1,500	N	N	10	>5,000	<1.0	N	20	30	1.5	20
8CS297	20.00	7.00	10.00	>1.000	3,000	N	N	15	>5,000	<1.0	N	30	20	30	30
Pluton no. 2															
8CS369	15.00	3.00	7.00	.700	2,000	N	N	10	2,000	<1.0	N	50	20	50	<20
Pluton no. 3A															
8FR467	10.00	5.00	7.00	1.000	1,500	N	N	<10	1,500	<1.0	N	15	15	20	20
8FR470A	10.00	5.00	5.00	.700	1,500	N	N	<10	1,500	<1.0	N	<5	15	15	30
8FR470B	7.00	3.00	5.00	.700	1,500	N	N	<10	2,000	<1.0	N	5	20	<20	
68AFR472	10.00	5.00	7.00	1.000	3,000	N	N	10	1,000	<1.0	200	50	50	300	20
8CS385	10.00	1.50	2.00	.700	1,500	N	N	20	1,500	1.0	N	10	15	300	30
Pluton no. 3A															
1FR234	7.00	1.50	1.50	.300	1,500	N	N	<10	1,000	1.0	N	10	30	70	<20
1FR237	7.00	5.00	3.00	.500	1,500	N	N	<10	700	<1.0	N	30	200	100	N
1FR252	5.00	.70	.50	.300	700	N	N	<10	1,000	1.0	N	10	<10	70	<20
1FR257	7.00	1.50	1.50	.300	1,500	N	N	<10	1,500	1.0	N	15	30	50	20
1WR131A	5.00	.70	.20	.300	1,000	N	N	<10	1,500	1.5	N	<5	<10	70	<20
1WR131C	5.00	1.00	1.00	.300	700	N	N	15	1,500	1.5	N	7	15	50	20
1FR286	10.00	3.00	3.00	.700	1,500	N	N	10	1,000	<1.0	N	30	20	300	<20
1FR287	5.00	1.00	1.50	.300	1,000	N	N	<10	1,000	1.0	N	<5	<10	70	20
1FR291	7.00	2.00	3.00	.700	1,500	N	N	<10	1,500	<1.0	N	15	<10	70	N
Pluton no. 3B															
1WR160B	5.00	1.50	1.50	.500	2,000	N	N	<10	1,500	1.5	N	15	20	70	<20
Pluton no. 3C															
1FR323	15.00	7.00	3.00	1.000	1,500	N	N	<10	700	<1.0	N	70	700	150	N
1FR367	15.00	3.00	7.00	.700	2,000	N	N	<10	700	1.5	N	30	30	70	50
Pluton no. 3D															
8CS283	7.00	.30	7.00	.700	1,500	N	N	10	?0,000	<1.0	N	15	70	30	30
8CS284	5.00	.70	7.00	.500	1,000	N	N	15	1,000	1.5	N	20	50	15	70
8CS285	7.00	1.00	7.00	.500	1,500	N	N	<10	1,500	1.0	N	15	20	20	50
8CS287	10.00	3.00	7.00	>1.000	1,500	N	<.5	10	2,000	<1.0	N	20	15	70	20
9FR674	.70	.20	.70	.070	200	N	N	N	500	1.5	N	N	5	N	N
9FR696	5.00	1.00	1.00	.300	3,000	N	N	15	1,500	1.0	N	5	10	7	20
9FR699	3.00	.70	1.00	.300	500	N	N	10	700	1.5	N	10	10	7	150
9FR254	10.00	1.50	2.00	.700	1,000	N	N	15	1,500	1.0	N	10	10	<5	20
9FR257B	3.00	1.00	5.00	.300	700	N	N	30	1,500	2.0	N	<5	10	20	N
9FR272	3.00	.70	1.50	.300	500	N	N	<200	30	1,000	N	<5	10	5	70

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska—Continued

sample	S-MO	S-NB	S-NI	S-PA	S-SR	S-SC	S-SN	S-SR	S-V	Pluton no. 1	S-W	S-Y	S-ZN	S-ZR	AA-AA-P	
8CS296	N	<10	7	<10	N	30	N	1,000	300	N	30	N	70	<.02		
8CS297	N	30	7	10	N	70	N	7,000	1,000	N	70	<200	100	<.02		
8CS369	N	10	5	<10	N	30	N	1,500	300	N	30	N	150	<.02		
8FR467	N	10	5	30	N	30	N	700	200	N	30	N	300	<.02		
8FR470A	N	10	<5	20	N	20	N	700	200	N	30	N	150	<.02		
8FR470B	N	<10	5	300	N	15	N	300	150	N	20	N	100	<.02		
68AFR472	N	<10	<5	10	N	30	N	500	300	N	30	N	200	<.02		
8CS385	N	15	5	30	N	7	N	200	100	N	30	N	700	<.02		
1FR234	<5	N	70	150	N	20	N	300	150	N	20	N	150	<.02		
1FR237	<5	N	100	30	N	30	N	700	300	N	30	N	100	<.02		
1FR252	<5	N	?	70	N	7	N	300	70	N	20	N	150	<.02		
1FR257	N	10	5	30	N	20	N	300	150	N	20	N	300	<.02		
1WR131A	N	10	7	50	N	7	N	150	70	N	20	N	200	<.02		
1WR131C	N	10	5	30	N	15	N	300	150	N	30	N	200	<.02		
1FR286	<5	10	10	70	N	30	10	300	500	N	30	N	100	<.02		
1FR287	N	10	5	50	N	15	N	300	70	N	20	N	150	<.02		
1FR291	N	10	<5	30	N	30	N	300	200	N	30	N	500	<.02		
1WR160B	N	<10	5	30	N	15	N	300	150	N	15	200	150	<.02		
1FR323	<5	<10	200	N	30	N	50	N	300	500	N	30	N	200	<.02	
1FR367	<5	<10	<5	30	N	70	N	700	300	N	30	N	500	<.02		
8CS283	N	15	7	70	N	30	N	300	150	N	50	N	200	<.02		
8CS284	N	20	5	30	N	30	N	700	150	N	30	<200	100	<.02		
8CS285	N	10	5	50	N	15	N	500	150	N	30	N	300	<.02		
8CS287	N	20	<5	15	N	50	N	300	300	N	50	N	200	<.02		
9FR674	N	<10	N	30	N	N	N	150	15	N	30	N	70	<.02		
9FR696	N	10	7	30	N	15	N	150	70	N	20	N	200	<.02		
9FR699	N	10	<5	15	N	15	N	200	50	N	30	N	100	<.02		
9FR254	N	10	10	30	N	10	N	200	150	N	20	<200	150	<.02		
9FR257B	N	15	10	20	N	N	N	300	70	N	20	N	200	<.02		
9FR272	N	15	30	N	7	N	N	200	30	N	15	N	100	<.02		

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska—continued.

Sample	S-FEZ	S-MGZ	S-CAZ	S-TIZ	S-MN	S-AG	S-AS	S-B	S-RA	S-RE	S-PI	S-CO	S-CR	S-CU	S-LA
0FR2437	5.00	1.50	2.00	.300	700	N	N	10	700	1.5	N	5	10	70	150
0FR322	10.00	2.00	2.00	.700	1,500	<.5	N	20	700	2.0	N	20	20	70	70
0FR323A	1.50	.03	.30	.030	150	N	N	30	50	2.0	N	<5	10	50	N
0WR64	5.00	2.00	3.00	.300	1,000	N	N	10	700	1.5	N	10	30	70	20
0WR100	.70	.10	.05	.030	700	1.0	N	30	150	3.0	<10	N	<10	100	N
0WR101	15.00	1.50	.30	.300	500	1.5	N	15	700	1.5	<10	20	20	100	70
0WR102	7.00	1.00	.05	.500	300	<.5	N	70	700	3.0	N	<5	20	20	<20
0WR117	3.00	1.50	<.05	.300	150	2.0	N	30	300	3.0	70	<5	20	70	<20
0WR118	3.00	.70	.30	.200	1,500	N	N	30	200	3.0	N	20	70	<70	<20
0WR43E	7.00	1.00	.30	.300	700	15.0	N	20	200	7.0	200	N	<10	300	N
1FR100	3.00	1.00	1.50	.300	700	N	N	10	700	2.0	N	10	20	30	N
1FR103	5.00	.70	1.50	.300	1,000	N	N	<10	700	1.5	N	<10	70	<70	<20
1FR106A	3.00	.70	1.50	.200	700	N	N	10	150	3.0	N	<10	50	50	50
1FR106B	5.00	.10	.05	.150	150	.5	700	<10	300	3.0	N	15	30	N	N
1FR111A	2.00	.50	.50	.200	500	N	N	<10	700	3.0	N	10	70	30	30
1WR11B	7.00	3.00	3.00	.700	1,500	N	N	<10	1,000	<1.0	N	30	150	70	<20
1WR81	5.00	1.50	1.50	.300	1,000	N	N	10	700	2.0	N	15	20	70	20
1WR83	5.00	1.50	1.50	.300	1,500	N	N	<10	1,000	2.0	N	15	30	70	30
1WR84B	3.00	.50	.50	.300	700	N	N	150	300	3.0	N	7	15	70	70
1WR87	7.00	.70	.10	.200	500	<.5	N	150	1,000	3.0	N	5	15	70	30
1WR88	5.00	.05	.05	.150	100	N	N	15	1,500	1.5	N	<10	50	N	N
1FR2141	2.00	.70	.15	.200	150	1.5	N	10	700	3.0	<10	200	100	N	N
1FR183	3.00	1.00	1.50	.200	700	N	N	<10	1,000	1.5	N	5	15	100	<20
1FR186	.70	.07	.30	.070	150	N	N	30	150	7.0	<10	N	100	N	N
1FR794	10.00	3.00	.30	.700	1,000	N	N	10	1,500	2.0	N	20	150	150	70
Pluton no. 3E															
9FR278	1.50	.07	.50	.150	150	N	N	<10	300	3.0	N	<5	5	50	N
9FR280	10.00	1.50	1.50	.500	700	N	N	300	1.0	N	10	10	<5	N	N
0FR2452A	2.00	.70	.70	.200	300	N	N	20	1,000	1.0	N	<10	10	150	30
0FR2452B	3.00	.15	1.50	.100	500	N	N	<10	700	1.5	N	<10	10	50	30
0FR2457A	3.00	.70	1.00	.200	700	N	N	>2,000	300	7.0	N	<10	10	50	20
0FR3035	2.00	.50	.70	.200	700	N	N	N	300	300	3.0	5.0	N	<20	N
0FR3035A	2.00	.50	.70	.200	500	N	N	N	300	150	3.0	N	10	50	300
0FR3036A	3.00	.70	.20	.300	300	<.5	N	N	20	500	2.0	N	15	50	70
0FR3044A	2.00	.20	.05	.200	150	N	N	<10	1,000	1.0	N	10	10	50	20
0FR3046	3.00	.70	1.00	.300	700	<.5	N	N	N	N	N	<5	10	50	20
0FR3047	3.00	.70	1.50	.300	1,000	N	N	10	700	2.0	N	<5	10	50	50
0FR3066	2.00	.70	1.00	.200	700	N	N	N	300	3.0	N	10	20	20	20
0FR3067A	3.00	.15	.50	.100	500	N	N	30	1,000	1.5	N	10	50	<20	N
0FR3068A	1.50	.07	.30	.030	300	N	N	10	1,000	1.5	N	10	70	<20	N
0FR297	3.00	1.00	1.50	.300	700	N	N	15	700	5.0	N	10	50	50	50

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska--continued

Sample	S-MO	S-NB	S-NI	S-PB	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	AA-AU-P	
OFR2437	N	10	<5	70	N	15	<10	300	100	N	20	N	200	<.02	
OFR322	N	15	5	100	N	15	<10	500	150	N	20	N	300	<.02	
OFR323A	N	10	<5	300	N	<5	30	<100	30	N	50	N	150	<.02	
OFR64	N	10	10	70	N	15	N	500	150	N	20	N	300	<.02	
OFR100	N	15	5	500	N	15	<100	20	N	100	N	150	<.02		
OFR101	<5	15	<5	70	N	15	>1,000	<100	70	N	20	<200	100	<.02	
OFR102	<5	15	<5	150	N	15	150	<100	100	N	70	N	300	<.02	
OFR117	N	10	<5	100	N	10	1,000	<100	100	N	20	N	500	<.02	
OFR118	N	10	10	15	N	10	30	<100	70	N	10	N	70	<.02	
OFR43E	20	10	<5	700	N	7	70	200	30	N	70	10	N	30	<.02
1FR100	N	<10	<5	70	N	15	N	300	150	N	20	N	150	<.02	
1FR103	N	10	<5	50	N	15	N	300	150	N	30	N	300	<.02	
1FR106A	N	<10	5	70	N	5	<100	30	N	<50	15	N	200	<.02	
1FR106B	5	<10	5	15	N	<5	<100	30	N	200	N	70	N	<.02	
1FR111A	N	<10	<5	70	N	5	N	200	30	N	15	N	150	<.02	
1FR111B	<5	<10	50	15	N	30	N	500	200	N	30	N	150	<.02	
1WR81	<5	10	7	70	N	15	N	300	150	N	20	N	200	<.02	
1WR83	<5	<10	7	70	N	15	N	700	150	N	30	N	200	<.02	
1WR84B	N	<10	7	70	N	15	<10	<100	100	N	30	N	150	<.02	
1WR87	N	<10	5	70	N	10	<10	<100	70	N	15	<200	70	<.02	
1WR88	<5	10	<5	70	N	7	15	<10	100	15	<50	30	N	300	<.02
1FR2141	N	<10	30	50	N	7	N	150	50	N	N	70	N	<.02	
1FR183	N	<10	5	70	N	7	N	300	70	N	20	N	200	<.02	
1FR186	N	10	<5	100	N	N	10	<100	<10	N	20	N	70	<.02	
1FR794	<5	10	50	30	N	20	N	150	300	N	30	N	300	<.02	
Pluton no. 3E															
9FR278	N	<10	7	20	N	N	<100	15	N	30	N	100	<.02		
9FR280	N	<10	7	15	N	7	N	150	100	N	15	N	70	<.02	
OFR2452A	N	<10	7	70	N	5	15	200	50	N	<10	N	150	<.02	
OFR2452B	N	<10	5	50	N	7	10	300	30	N	30	N	150	<.02	
OFR2457A	N	<10	5	70	N	7	15	200	30	N	15	N	150	<.02	
OFR3035	N	<10	<5	70	N	N	<5	<10	200	30	N	10	N	150	<.02
OFR3035A	N	<10	<5	70	N	5	15	200	30	N	10	N	150	<.02	
OFR3036A	N	<10	5	20	N	5	15	150	70	N	50	N	150	<.02	
OFR3044A	N	20	5	70	N	10	10	<100	30	N	70	10	N	<.02	
OFR3046	N	<10	5	70	N	10	10	300	70	N	15	N	150	<.02	
OFR3047	N	<10	5	70	N	10	10	500	50	N	20	N	150	<.02	
OFR3066	N	<10	5	70	N	7	<10	300	50	N	15	N	150	<.02	
OFR3067A	N	<10	5	70	N	5	N	200	20	N	20	N	150	<.02	
OFR3068A	N	<10	<5	70	N	100	30	N	20	N	70	N	70	<.02	
OFR297	N	<10	5	100	N	10	10	300	70	N	20	N	200	<.02	

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska--continued.

Sample	S-FEZ	S-MGZ	S-CAZ	S-TIZ	S-MN	S-AG	S-AS	S-B	S-RA	S-RE	S-BI	S-CO	S-CR	S-CU	S-LA
0FR298	2.00	.30	.70	.150	700	N	N	150	700	1.5	N	<5	10	70	30
0FR302	15.00	7.00	10.00	1.000	5.000	N	N	15	1,500	N	3.0	100	<20	50	30
0FR307	3.00	1.50	1.50	.300	700	N	N	100	500	5.0	N	<5	20	100	20
0FR310	3.00	1.00	1.50	.200	1.000	N	N	150	700	3.0	N	15	70	20	20
0FR402	3.00	.50	.70	.200	.300	N	N	500	500	3.0	N	<10	20	20	20
0FR403	3.00	.70	1.00	.300	500	N	N	<200	<10	500	3.0	<10	70	70	30
0FR404	2.00	.30	.70	.150	700	N	N	<10	15	300	2.0	<10	20	20	20
0FR434	2.00	.30	.50	.200	500	N	N	<10	500	1.5	N	<10	70	50	50
0FR460	3.00	.70	.70	.200	700	N	N	<10	300	3.0	N	<5	<10	15	20
0FR461	3.00	.70	1.00	.200	500	N	N	700	3.0	<10	<5	<10	50	50	30
0FR462B	3.00	.70	.70	.200	500	N	N	500	3.0	N	10	50	20	20	20
0FR462C	3.00	.70	.70	.150	500	N	N	<200	N	3.0	<10	N	<10	20	20
0FR464B	1.50	.15	.30	.100	30	N	N	<200	N	700	1.5	<10	N	<10	20
0FR465	3.00	.70	.70	.200	300	N	N	700	3.0	N	10	70	<20	20	20
0FR467	7.00	2.00	2.00	1.000	1,000	N	N	<10	700	1.0	N	1.5	<10	15	30
0FR464C	.70	.15	.50	.070	.30	N	N	700	1.5	N	<5	<10	30	<20	<20
0FR2524	3.00	.50	.50	.300	500	<.5	N	<10	300	<1.0	N	<5	<10	100	100
0FR3128	3.00	1.00	1.00	.300	500	N	N	<10	700	1.5	N	<10	7	<20	<20
0FR3112	5.00	1.50	7.00	.500	500	N	N	70	300	1.5	N	30	<5	N	50
0FR430	3.00	.70	1.00	.300	700	N	N	700	3.0	N	10	<5	50	50	50
0WR156B	1.50	.30	.50	.150	150	N	N	<10	1,500	N	N	<10	<5	N	N
1FR177A	7.00	3.00	1.50	.500	1,500	N	N	15	1,500	1.0	N	15	70	70	70
1FR200	3.00	1.00	1.50	.200	700	N	N	1,000	1,000	3.0	N	15	15	100	30
1FR201	5.00	1.50	1.50	.300	1,000	N	N	<10	1,500	2.0	N	15	30	70	20
1FR205A	7.00	1.50	3.00	.700	1,500	N	N	10	1,000	1.5	N	15	10	70	50
1FR743	5.00	.70	1.00	.300	700	N	N	<10	1,500	1.5	N	<10	<5	<20	<20
1FR745	3.00	.70	.70	.300	700	N	N	10	1,500	2.0	N	<10	<5	<20	<20
1FR764	3.00	.70	1.00	.300	300	N	N	10	700	3.0	N	15	<5	<20	<20
1FR766B	2.00	.05	.20	.100	300	N	N	<10	70	7.0	N	N	5	100	100
1FR767B	3.00	.30	.30	.150	300	N	N	>2,000	700	1.5	20	N	<5	50	50
1FR767C	2.00	.30	.30	.100	500	N	N	<10	700	3.0	N	N	<5	20	20
1FR769	1.50	<.02	.05	.150	.30	N	N	<10	150	3.0	N	N	<5	30	30
Pluton no. 3F															
0FR373	5.00	1.50	1.50	.700	1,500	N	N	10	1,500	3.0	N	5	10	150	70
0FR437A	3.00	1.50	1.50	.300	700	N	N	15	500	1.5	N	<5	<10	50	30
0FR437B	.50	<.02	.30	.020	150	N	N	15	50	3.0	N	<10	N	<10	<20
0FR438A	5.00	1.00	1.50	.300	700	N	N	<10	150	1.0	N	10	15	<20	<20
0FR538	5.00	1.50	2.00	.300	1,000	N	N	<10	700	1.5	N	<10	<5	150	150
0FR581	15.00	3.00	3.00	.700	2,000	N	N	10	1,000	1.0	N	10	15	5	<20
0FR3078	7.00	1.50	1.50	.300	100	N	N	20	700	3.0	N	10	70	<5	70
0FR3080B	.30	.10	.300	.020	70	N	N	20	150	5.0	N	<10	<5	<5	N

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska--continued

sample	S-MO	S-NB	S-NI	S-PH	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	AA-AU-P
OFR298	N	<10	5	70	N	<5	15	200	30	N	15	N	100	<.02
OFR302	<5	<10	15	30	N	50	N	700	500	N	50	N	150	<.02
OFR307	N	<10	10	150	N	5	15	300	30	N	15	N	150	<.02
OFR310	N	10	5	150	N	<5	15	300	30	N	15	N	150	<.02
OFR402	N	<10	5	70	N	5	10	300	30	N	10	N	150	<.02
OFR403	N	<10	5	70	N	7	N	300	70	N	15	N	150	<.02
OFR404	N	<10	5	70	N	5	30	200	30	N	15	N	70	<.02
OFR434	N	15	5	70	N	15	300	30	N	15	N	150	<.02	
OFR460	N	10	<5	50	N	5	N	200	50	N	10	N	200	<.02
OFR461	N	<10	5	70	N	5	<10	300	50	N	10	N	150	<.02
OFR462B	N	<10	5	70	N	5	<10	300	30	N	15	N	150	<.02
OFR462C	N	<10	7	70	N	5	<10	300	70	N	10	N	150	<.02
OFR464B	N	<10	5	30	N	<10	200	30	N	15	N	150	<.02	
OFR465	N	<10	5	70	N	5	<10	300	50	N	10	N	200	<.02
OFR467	N	15	5	15	N	15	N	500	200	N	15	N	300	<.02
OFR464C	<5	10	<5	30	N	15	200	30	N	15	N	150	<.02	
OFR252	4	N	<5	70	N	<5	<10	150	20	N	10	N	300	<.02
OFR312	B	N	<10	<5	30	10	<10	300	70	N	15	N	150	<.02
OFR311	2	N	<10	15	70	10	<10	200	70	N	15	N	200	<.02
OFR430	N	<10	5	50	N	5	10	500	50	N	10	N	200	<.02
OFR156B	N	<10	50	70	N	<5	10	200	30	N	10	N	50	<.02
1FR177A	<5	10	150	50	N	30	N	300	200	N	20	N	<200	<.02
1FR200	N	<10	5	70	N	15	<10	300	70	N	20	N	200	<.02
1FR201	N	<10	7	70	N	20	N	500	100	N	20	N	150	<.02
1FR205A	N	10	<5	70	N	30	N	500	150	N	30	N	300	<.02
1FR743	N	<10	<5	30	N	7	N	150	70	N	15	N	150	<.02
1FR745	N	<10	<5	70	N	5	<10	150	30	N	10	N	150	<.02
1FR764	N	<10	7	70	N	7	<10	200	50	N	10	N	150	<.02
1FR766B	<5	30	<5	70	N	20	<100	10	N	70	N	<200	<.02	
1FR767B	N	<10	<5	30	N	<5	<10	150	15	N	30	N	100	<.02
1FR767C	N	<10	<5	70	N	<5	<10	100	15	N	10	N	100	<.02
1FR769	<5	20	<5	70	N	N	15	<100	10	N	30	N	200	<.02
Pluton no. 3F														
OFR373	N	15	5	70	N	15	500	70	N	30	N	500	<.02	
OFR437A	N	10	<5	50	N	15	10	300	150	N	20	N	150	<.02
OFR437B	N	<10	<5	70	N	N	N	<100	30	N	20	N	50	<.02
OFR438A	N	<10	7	15	N	15	N	300	150	N	10	N	150	<.02
OFR538	N	<10	5	50	N	10	N	300	150	N	30	N	150	<.02
OFR581	<5	10	<5	50	N	20	N	500	150	N	20	N	500	<.02
OFR307R	<5	20	30	50	N	15	300	150	N	30	N	200	<.02	
OFR308B	N	15	5	20	N	N	300	20	N	20	N	30	<.02	

Table 3.--Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska--continued

sample	S-FE%	S-MG%	S-CA%	S-Ti%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CO	S-CR	S-CU	S-LA
1FR114	1.50	.20	.50	.150	200	N	N	N	700	3.0	<10	N	N	70	70
1FR117	7.00	1.50	1.50	*.700	1,000	N	N	<10	1,000	1.5	15	15	70	70	70
1FR121	7.00	1.50	.70	*.700	500	N	N	<10	300	1.5	N	30	100	70	70
1FR123	1.50	.30	.30	*.150	200	N	N	30	300	7.0	N	N	15	50	N
9FR848	.50	.05	.20	.020	150	N	N	N	N	N	N	N	5	10	N
9FR51B	.70	.15	<.05	.150	50	N	N	N	500	1.5	5	5	20	20	20
9FR54	3.00	.70	1.50	*.300	700	N	N	N	1,000	1.5	<5	5	20	20	20
9FR55	5.00	1.50	2.00	*.500	1,500	<.5	N	<10	300	2.0	10	10	150	20	20
9FR56A	3.00	.70	.70	*.150	500	.5	N	10	300	1.5	N	N	10	300	N
9FR57	1.50	*.20	.70	*.100	150	<.5	N	N	10	300	N	N	10	N	<20
9FR59	10.00	3.00	3.00	*.700	1,000	N	N	<10	300	<1.0	20	20	10	<5	N
9FR62	2.00	.70	1.50	*.300	500	N	N	N	700	1.5	N	N	<5	20	20
9FR63	1.50	.70	1.00	*.200	300	<.5	N	N	1,500	2.0	N	N	10	10	<20
9FR64A	3.00	1.00	1.50	*.500	700	N	2,000	N	1,500	1.0	5	10	5	<20	N
9FR64B	3.00	1.50	1.50	*.500	300	N	N	N	700	<1.0	N	N	10	20	20
9FR66A	15.00	3.00	5.00	*.1,000	1,500	<.5	N	<10	1,500	1.5	30	30	150	50	50
9FR70	2.00	1.00	1.00	*.150	300	N	N	N	1,000	1.5	N	N	15	<5	<20
9FR72A	3.00	1.00	1.50	*.500	500	N	N	N	700	<1.0	N	N	15	5	20
9FR72B	3.00	1.50	2.00	*.300	700	N	N	<10	700	<1.0	N	N	10	<5	20
9FR72C	10.00	3.00	2.00	*.700	1,000	N	N	N	1,500	2.0	N	N	20	30	7
9FR80A	3.00	*.20	.70	*.150	500	N	N	N	1,500	2.0	<5	<5	70	N	N
9FR80B	.30	.02	.15	*.030	100	N	N	20	1,500	1.0	N	N	<5	N	N
9FR81	.70	.05	.20	*.030	150	N	N	N	150	1.5	N	N	<5	N	N
9FR82	2.00	.15	.15	*.200	300	N	N	N	1,000	1.5	N	N	<5	50	50
9FR84A	3.00	1.50	1.50	*.300	500	N	N	N	500	1.5	15	15	150	<5	30
9FR84D	2.00	.70	1.00	*.200	500	N	N	N	700	1.5	<5	<5	20	20	20
9FR86	3.00	.70	1.50	*.300	1,000	<.5	N	N	700	1.0	N	N	<5	20	<20
9FR86C	3.00	.70	.70	*.300	700	<.5	N	N	2,000	<1.0	N	N	<5	5	30
9FR86E	3.00	.70	.70	*.300	500	<.5	N	N	1,500	1.0	7	10	30	<20	N
9FR89	1.00	.07	.15	*.100	100	N	N	N	500	1.0	<5	<5	5	N	N
9FR91A	.70	.07	.15	*.030	70	N	N	N	300	1.5	<5	<5	N	N	N
9FR91B	.70	.07	.20	*.030	100	N	N	N	300	1.0	N	N	10	<5	N
9FR95	1.50	.30	.50	*.100	300	N	N	N	1,500	1.5	<5	<5	<5	<5	N
9FR95A	.70	.02	.07	*.020	300	N	N	N	N	N	N	N	N	N	N
9FR97	1.00	.07	.15	*.030	300	N	N	N	300	1.5	N	N	<5	N	N
9WR42	15.00	.02	<.05	*.100	700	N	N	N	10	700	5.0	N	<5	50	N
9WR45A	3.00	.50	.70	*.200	200	N	N	N	1,000	1.0	N	N	<5	20	<20
9WR48	2.00	.50	.70	*.200	500	<.5	N	N	700	1.5	<5	<5	N	N	N
9WR50	3.00	.70	.70	*.200	300	20.0	2,000	N	30	1.5	10	10	10	10	50

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska—continued.

sample	S-M0	S-NB	S-N1	S-P0	S-SB	S-SC	S-SN	S-SR	S-V	S-ZN	S-ZR	AA-AAU-P
1FR114	N	<10	<5	70	N	<5	N	150	15	<.02	<.02	
1FR117	<5	10	5	30	N	20	N	700	200	<.02	<.02	
1FR121	<5	10	30	30	N	20	N	<150	200	<.02	<.02	
1FR123	N	15	7	10	N	15	50	<100	50	N	N	<.02
9FR848	N	10	5	20	N	<5	N	<150	<10	N	20	
9FR51B	<5	30	5	N	N	5	<10	N	10	N	150	
9FR54	N	10	5	15	N	15	N	200	100	N	70	
9FR55	<5	10	<5	30	N	15	30	300	150	N	150	
9FR56A	N	<10	N	30	N	7	N	150	30	N	10	<.08
9FR57	N	<10	N	15	N	<5	N	150	15	N	10	<.02
9FR59	<5	10	N	15	N	20	N	300	200	N	200	
9FR62	N	10	<5	30	N	7	N	200	50	N	100	
9FR63	N	10	<5	30	N	5	N	200	30	N	100	
9FR64A	N	<10	5	30	N	15	<10	200	70	N	20	<.02
9FR64B	N	<10	5	<10	N	20	N	200	150	N	15	<.02
9FR66A	<5	30	70	<10	N	15	30	150	100	N	70	
9FR70	N	10	10	30	N	7	N	150	70	N	300	
9FR72A	N	<10	7	10	N	15	N	150	100	N	200	
9FR72B	N	<10	5	10	N	20	N	150	150	N	20	<.02
9FR72C	N	<10	20	15	N	30	N	200	200	N	30	<.02
9FR80A	N	30	5	10	N	15	N	150	15	N	50	
9FR80B	N	<10	10	15	N	<5	N	N	15	N	10	<.02
9FR81	N	20	<5	20	N	N	N	N	15	N	10	<.02
9FR82	N	30	5	10	N	7	N	<100	15	N	20	<.02
9FR84A	N	10	50	15	N	15	N	150	100	N	15	<.02
9FR84D	N	<10	<5	30	N	7	N	150	30	N	15	
9FR86	N	<10	<5	15	N	10	10	150	50	N	15	
9FR86C	N	10	7	50	N	10	10	150	70	N	15	
9FR86E	N	10	7	70	N	<5	15	150	100	N	20	<.02
9FR89	N	30	5	10	N	N	<10	<100	15	N	100	<.02
9FR91A	N	50	5	15	N	N	<100	N	15	N	<10	<.02
9FR91B	N	20	5	<10	N	N	<100	N	15	N	10	<.02
9FR95	N	<10	5	<10	N	N	<10	100	20	N	10	<.02
9FR95A	N	10	5	30	N	10	15	N	15	N	50	<.02
9FR97	N	10	5	30	N	7	N	N	15	N	30	<.02
9WR42	15	10	N	15	N	7	N	N	20	N	50	<.02
9WR45A	70	10	<5	<10	N	7	N	<100	20	N	20	<.02
9WR48	N	<10	<5	15	N	7	N	100	20	N	15	<.02
9WR50	20	10	5	1,000	N	15	N	150	50	N	30	<.02

Table 3.--Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska--continued

sample	S-FEX	S-MG%	S-CA%	S-T1%	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CO	S-CR	S-CU	S-LA
9WR50A	3.00	.50	.10	.200	150	<.5	N	30	1,000	1.0	N	N	<5	10	<20
9WR52	1.50	.30	.30	.150	200	.5	N	300	1,500	2.0	N	N	<5	7	<20
9WR55	1.50	.50	.70	.150	700	.7	N	300	1,500	1.0	N	N	<5	5	<20
9WR55A	3.00	.70	.70	.300	700	2.0	N	300	1,000	1.0	N	N	<5	5	20
9WR57	1.00	.05	.07	.070	70	N	30	300	2.0	N	N	<5	<5	<20	
9WR58	1.50	.07	.15	.030	150	N	N	300	2.0	N	N	<5	<5	<20	
9WR60A	3.00	.10	.70	.100	1,000	<.5	N	300	1.5	N	N	<5	10	N	
9WR61	7.00	1.50	1.50	.700	1,000	N	N	1,500	N	2.0	N	N	<5	7	<20
9WR65	7.00	.50	.07	.700	200	N	30	300	1.5	N	N	<5	<5	<20	
9WR66B	5.00	.70	.20	.700	700	N	10	700	1.0	N	N	<5	15	5	30
9WR66C	3.00	.70	.50	.300	700	1.0	N	<10	300	N	N	5	15	500	N
9WR74	5.00	1.50	3.00	.500	1,500	N	10	1,500	1.0	N	N	<5	<5	N	
9WR77	10.00	1.50	1.50	.700	1,500	N	15	700	3.0	N	15	N	10	70	<20
9WR85	1.50	.50	1.00	.150	500	N	10	700	1.5	N	N	<5	<5	<20	
9WR89	1.50	.07	.07	.100	150	N	<10	1,500	1.5	N	<5	10	<5	<20	
9WR91	1.50	.07	.05	.030	150	N	N	<10	1,500	<1.0	N	N	<5	<5	20
9WR107	1.50	.20	.10	.070	300	N	N	N	700	<1.0	N	N	10	5	N
9WR114	3.00	1.50	.70	.700	700	N	30	700	1.5	N	N	<5	30	5	<20
9WR124	5.00	1.00	.300	.500	N	N	N	N	700	1.0	N	N	15	5	<20
9WR139A	.30	.02	<.05	.015	70	<.5	N	10	300	<1.0	N	N	<5	10	N
9FR184A	3.00	.70	.70	.200	300	N	N	N	1,500	N	N	N	10	<5	<20
9FR204	3.00	.70	1.50	.300	700	<.5	N	500	<1.0	N	N	<5	500	<20	
OFR2471	2.00	.50	.70	.150	700	N	N	500	<1.0	N	N	<10	10	150	20
OFR2477D	3.00	.50	1.00	.200	300	N	10	300	7.0	N	N	<10	10	50	70
OFR2479A	3.00	.50	.50	.200	300	N	N	30	300	5.0	N	N	<10	10	50
OFR2484	3.00	1.00	1.50	.300	700	N	N	N	10	500	2.0	N	10	70	30
OFR2491	1.00	1.15	<.05	.070	70	N	N	15	100	1.0	N	N	<10	70	N
OFR525A	.50	.07	.07	.015	100	<.5	N	<200	<10	70	3.0	N	10	7	N
OFR525R	3.00	.70	.70	.300	700	N	N	30	700	3.0	N	N	<10	10	<20
OFR536	5.00	1.50	1.00	.300	1,000	N	N	<10	700	3.0	N	N	<5	<5	<20
OFR3090A	3.00	1.00	1.00	.300	700	N	N	N	15	500	7.0	N	<5	10	50
OFR3091	5.00	1.50	1.50	.300	700	N	N	<10	700	1.5	N	N	<5	5	30
OFR3092	5.00	.50	1.00	.200	700	N	N	<10	1,000	1.5	N	N	<5	7	<20
OFR3186	15.00	5.00	7.00	1,000	200	N	N	15	1,000	1.0	N	N	30	150	70
OFR3189	10.00	7.00	7.00	.700	3,000	N	N	15	1,000	1.5	N	N	30	70	100
OFR611C	7.00	1.50	1.50	.300	700	N	N	10	300	N	N	<5	<5	<20	
OFR2502	15.00	7.00	7.00	1,000	1,500	<.5	N	N	10	700	1.0	N	N	50	150
OFR2510	2.00	.20	.07	.150	500	N	N	N	30	150	2.0	N	<5	10	<20
OFR3113A	3.00	1.00	1.00	.300	700	N	N	<200	N	700	1.5	N	<10	5	30
OFR3115A	<.05	.02	<.05	.030	30	N	N	N	50	N	1.5	N	<10	15	N
OFR3119	3.00	1.00	1.50	.300	500	N	N	200	500	1.5	N	N	<10	15	30
OFR3126	1.50	.30	.70	.300	700	<.5	N	N	N	200	500	1.5	N	<5	30
1WR266C	5.00	.70	1.00	.300	1,000	N	N	N	N	1,000	2.0	N	N	7	50
1WR267B	2.00	.02	.15	.020	150	N	N	<10	70	2.0	N	N	<5	5	N
1WR265A	2.00	.30	.50	.150	500	N	N	N	1,500	1.5	N	N	5	5	N
1WR269A	1.50	.10	.10	.070	30	N	N	N	150	1.5	N	N	5	70	N
1FR566B	5.00	.70	.70	.300	700	N	N	N	N	1,000	2.0	N	N	7	50

Table 3.--Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska--continued

sample	S-MO	S-NB	S-NI	S-PF	S-SB	S-SC	S-SSN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	AA-AU-P		
9WR50A	N	<10	<5	30	N	5	15	150	30	N	15	N	70	<.02		
9WR52	N	<10	N	700	N	7	30	100	20	N	15	N	70	<.02		
9WR55	N	<10	N	100	N	7	<10	150	15	N	20	<200	70	<.02		
9WR55A	N	10	<5	500	N	10	<10	100	20	N	20	300	300	<.02		
9WR57	N	15	N	20	N	7	<10	<100	15	N	30	N	200	<.02		
9WR58	N	15	5	15	N	<5	N	N	10	N	30	N	70	<.02		
9WR60A	N	50	5	50	N	15	30	200	10	N	50	N	150	<.02		
9WR61	N	10	<5	30	N	15	<10	150	150	N	15	<200	150	<.02		
9WR65	N	15	<5	15	N	15	<10	<100	150	N	10	<200	150	<.02		
9WR66B	N	15	<5	30	N	15	<10	100	100	N	15	N	150	<.02		
9WR66C	N	10	5	500	N	10	<5	N	<100	50	N	10	<200	70	<.02	
9WR74	N	10	<5	50	N	7	10	<10	300	150	N	20	<200	100	<.02	
9WR77	<5	10	N	50	N	7	30	150	70	N	20	N	70	<.02		
9WR85	N	<10	N	30	N	7	N	150	30	N	30	N	50	<.02		
9WR89	N	10	<5	30	N	N	N	100	15	N	50	N	300	<.02		
9WR91	N	<10	N	30	N	N	N	N	100	15	N	10	N	70	<.02	
9WR107	N	<10	N	50	N	5	<10	N	15	N	10	N	70	<.02		
9WR114	N	10	15	20	N	15	N	15	150	100	N	15	N	500	<.02	
9WR124	N	<10	N	20	N	7	N	200	100	N	15	N	100	<.02		
9WR139A	N	<10	N	10	N	<5	N	N	10	N	30	N	50	<.02		
9FR184A	N	<10	N	15	N	5	N	200	30	N	15	N	150	<.02		
9FR204	N	<10	N	10	N	15	N	150	70	N	15	N	150	<.02		
OFR2471	N	10	5	70	N	5	<10	200	30	N	15	N	150	<.02		
OFR2470	N	<10	5	70	N	<5	15	<100	30	N	50	N	150	<.02		
OFR2479A	N	<10	5	70	N	5	15	200	30	N	20	N	150	<.02		
OFR2484	N	<10	5	70	N	<5	N	10	300	70	N	15	N	200	<.02	
OFR2491	N	<10	5	15	N	10	N	<100	30	N	<10	N	70	<.02		
OFR525A	N	<10	10	5	70	N	5	<10	300	30	N	15	N	150	<.02	
OFR525B	N	<10	5	70	N	7	N	15	300	100	N	50	N	300	<.02	
OFR536	N	10	5	70	N	7	N	7	<10	300	70	N	200	150	<.02	
OFR3090A	N	10	5	70	N	70	N	7	<10	300	70	N	20	N	150	<.02
OFR3091	N	10	5	70	N	10	N	10	<10	300	70	N	20	N	200	<.02
OFR3092	N	15	5	50	N	10	N	10	<10	300	30	N	30	N	100	<.02
OFR3186	<5	10	30	<10	N	30	N	30	1,000	500	N	20	N	150	<.02	
OFR3189	<5	10	15	<10	N	30	N	30	1,500	500	N	20	N	150	<.02	
OFR611C	N	10	5	15	N	15	N	15	150	150	N	15	N	70	<.02	
OFR2502	<5	10	15	30	N	30	N	500	300	N	30	N	70	<.02		
OFR2510	N	10	10	20	N	5	N	100	50	N	<10	N	50	<.02		
OFR3113A	N	<10	<5	70	N	10	<10	300	70	N	20	N	200	<.02		
OFR3115A	N	<10	<5	N	50	N	7	<100	300	N	<10	N	300	<.02		
OFR3119	N	<10	<5	50	N	7	N	7	<10	200	30	N	100	<.02		
OFR3126	N	<10	<5	50	N	7	N	7	<10	200	30	N	15	N	100	<.02
1WR266C	N	<10	5	15	<5	50	N	7	10	300	50	N	50	N	150	<.02
1WR262A	<5	15	<5	50	N	20	N	15	<10	N	10	N	70	N	70	<.02
1WR265A	7	10	<5	20	N	7	N	15	20	N	15	N	100	N	100	<.02
1WR269A	N	<10	7	10	N	7	N	15	20	N	15	N	30	N	30	<.02
1FR566R	N	<10	5	15	<5	50	N	15	<10	N	10	N	10	N	10	<.02

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska—continued

sample	S-FEX	S-MG%	S-CA%	S-TIX	S-MN	S-CO	S-CR	S-CU	S-LA
1FR567B	5.00	1.50	1.50	.500	700	2.0	<5	10	20
1FR568	1.50	.03	.10	.030	200	3.0	<5	N	<5
1FR569	3.00	.03	.15	.070	150	3.0	<5	N	50
1FR570	3.00	.70	1.00	.200	700	1.0	<10	<5	50
1FR580	1.50	.07	.20	.050	700	2.0	N	N	N
1FR583A									
1FR583B	3.00	.05	.15	.070	50	2.0	N	7	N
1FR585	2.00	.10	.20	.070	700	1.5	N	<5	N
1FR592A	7.00	1.00	2.00	.500	1,000	1.0	<5	<10	50
1FR596C	7.00	2.00	2.00	.300	1,500	1.0	<10	<5	30
1FR628	2.00	.70	.70	.150	700	1.0	<10	<5	<20
1FR629B	3.00	.10	1.00	.200	500	<1.0	N	<5	<20
1FR631	5.00	1.50	1.00	.300	700	1.0	<10	N	50
1FR635	5.00	1.00	1.50	.300	700	1.0	<5	N	30
1FR636A	7.00	1.50	1.00	.500	1,500	3.0	<10	N	20
1FR636B	5.00	.50	.70	.300	700	1.0	<10	N	70
1FR637B	1.50	.02	.05	.150	50	N	<10	<10	20
1FR638	3.00	.15	.30	.100	700	1.0	1,000	20	100
1FR639	1.50	.05	.30	.070	70	N	1,500	N	<20
1FR640	5.00	1.00	1.50	.500	700	1.5	N	10	30
1FR658	10.00	1.00	1.00	.500	700	1.5	<10	5	20
1FR661	7.00	1.50	2.00	.700	1,500	N	<10	10	150
1FR666	1.00	.07	<.05	.100	70	N	50	N	N
1FR668A	1.50	.07	.05	.070	700	<.5	10	1,500	N
1FR668B	1.00	.15	<.05	.050	15	<.5	300	700	1.0
1FR668C	.70	.07	<.05	.150	15	<.5	30	700	1.5
1FR680	1.50	.50	1.50	.150	300	N	N	<5	N
1FR704	3.00	.03	.07	.150	70	N	N	<5	30
9FR2080	1.00	.20	.20	.050	200	5.0	N	20	N
9FR665	7.00	1.50	2.00	.300	1,500	N	<10	30	30
OFR2358	7.00	1.50	3.00	.500	1,500	<.5	N	15	30
OFR263	10.00	7.00	>1.00	2,000	2,000	N	20	300	700
OFR265A	3.00	.15	.30	.150	300	N	70	100	50
0FR265B	7.00	1.50	2.00	.300	1,500	N	<10	1,500	1.5
0FR266	3.00	.20	.10	.070	700	5.0	N	30	20
0FR415A	1.50	.30	.30	.200	300	N	<200	150	300
0FR415B	2.00	.30	.50	.150	300	N	<200	N	<10
0FR605A	1.00	.15	.07	.050	300	1.5	N	10	20
0FR605B	3.00	.70	1.00	.200	1,000	15.0	N	<10	5
0FR620	.70	1.70	.70	.070	150	5.0	N	10	20
0FR621	1.00	.20	.70	.100	300	7.0	N	10	<5
0FR622	3.00	.70	.70	.200	1,500	5.0	N	10	<20

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska—continued.

sample	S-MO	S-NB	S-NI	S-PB	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	A-N-A(U-P)
1FR567B	N	<10	5	30	N	10	<10	200	150	N	20	N	150	<.02
1FR568	<5	15	5	70	N	10	<100	15	N	30	N	70	<.02	
1FR569	N	20	5	70	N	10	<100	10	N	70	N	100	<.02	
1FR580	N	10	<5	30	N	7	<10	300	70	N	30	N	200	<.02
1FR583A	N	<10	<5	30	N	<5	10	<100	10	N	20	N	50	<.02
1FR593B	<5	10	<5	15	N	<5	10	<100	10	N	30	N	100	<.02
1FR585	N	<10	<5	50	N	<10	<100	10	N	30	N	70	<.02	
1FR592A	N	<10	<5	30	N	10	N	300	70	N	15	N	300	<.02
1FR596C	N	10	5	30	N	15	N	150	150	N	20	N	200	<.02
1FR628	N	<10	<5	50	N	5	N	<100	70	N	10	N	50	<.02
1FR629B	N	<10	<5	20	N	15	N	200	100	N	20	N	200	<.02
1FR631	N	<10	<5	20	N	10	<10	200	100	N	30	N	150	<.02
1FR635	N	<10	<5	30	N	10	15	150	150	N	<50	N	<200	<.02
1FR636A	<5	<10	<5	70	N	15	N	10	150	N	15	N	300	<.02
1FR636B	150	<10	<5	30	N	10	<10	150	70	N	15	N	150	<.02
1FR637B	N	<10	<5	10	N	5	N	200	30	N	30	N	70	<.02
1FR638	<5	<10	5	50	N	<5	<10	150	15	N	30	N	150	<.02
1FR639	N	<10	<5	30	N	<5	N	100	10	N	15	N	70	<.02
1FR640	N	<10	<5	20	N	15	N	300	150	N	20	N	100	<.02
1FR658	N	<10	5	20	N	15	N	200	200	N	30	N	150	<.02
1FR661	N	<10	<5	30	N	15	N	300	200	N	20	N	100	<.02
1FR666	N	<10	<5	30	N	<5	N	<100	15	N	15	N	50	<.02
1FR668A	N	<10	<5	30	N	15	N	<10	100	N	20	N	100	<.02
1FR668B	N	<10	<5	30	N	15	N	100	15	N	15	N	70	<.02
1FR668C	N	<10	<5	15	2,000	N	N	<100	20	N	10	N	70	<.02
1FR680	N	<10	<5	N	N	<5	N	100	30	N	<10	N	<10	<.02
										Pluton no.	3H			
1FR704	<5	50	<5	200	N	5	N	<10	10	N	10	N	500	<.02
9FR2080	N	10	7	15	N	15	N	1,000	150	N	20	N	100	<.02
9FR665	<5	10	15	70	N	20	N	300	150	N	50	N	300	<.02
OFR2358	N	10	15	150	20	30	N	500	200	N	20	N	150	<.02
OFR263	<5	15	150	70	N	20	N	<100	20	N	100	N	200	<.02
OFR265A	5	30	N	70	N	5	N	20	150	N	30	N	300	<.02
OFR265B	<5	10	10	70	N	20	N	<10	300	N	30	N	300	<.02
OFR266	<5	70	5	100	N	50	N	<100	20	N	30	N	300	<.02
OFR415A	N	<10	<5	70	N	10	N	100	150	N	10	N	70	<.02
OFR415B	N	<10	<5	70	N	5	N	<10	200	N	10	N	150	<.02
OFR605A	N	<10	7	50	N	<5	N	<100	20	N	10	N	70	<.02
OFR605B	N	<10	<5	70	N	10	N	<10	300	N	15	N	200	<.02
OFR620	N	10	7	70	N	5	N	15	150	N	15	N	70	<.02
OFR621	N	10	7	150	N	15	N	15	150	N	15	N	70	<.02
OFR624	N	10	5	70	N	10	N	<10	200	N	15	N	150	<.02

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Castle quadrangle, Alaska--continued

Sample	S-FE%	S-MG%	S-CAX	S-TIV	S-MN	S-AG	S-AS	S-R	S-PA	S-BF	S-RI	S-CO	S-CR	S-CU	S-LA	
OWR130	3.00	1.50	3.00	*300	700	N	N	<10	1,000	1.5	N	<5	<10	<5	<20	
OWR134	3.00	.50	.70	*300	700	<.5	N	<10	1,000	1.0	N	<5	<10	<5	20	
OWR141	3.00	.70	1.00	*300	700	<.5	N	<10	500	5.0	N	<5	<10	5	70	
OWR148	3.00	.30	*50	*200	300	N	N	N	1,000	N	N	<10	<5	<10	?00	
1FR848	10.00	1.50	1.50	*500	1,500	N	N	<10	1,500	3.0	N	15	150	10	50	
1FR852	10.00	2.00	1.00	*30	150	300	N	N	<10	1,500	1.5	N	<5	70	<5	30
1WR307																
1FR543	3.00	1.00	1.50	*300	700	N	N	<10	700	5.0	N	5	10	N	50	
8FR104	*70	.07	.05	*030	5,000	3.0	N	<10	700	1.0	N	30	<5	N		
8CS6	3.00	1.50	2.00	*200	500	<.5	N	N	1,500	1.5	N	50	70	30		
8CS11	5.00	1.50	3.00	*300	700	<.5	N	<10	1,000	1.0	N	30	15	30		
8FR164D1	1.50	.70	*07	*150	150	.7	N	70	150	3.0	N	15	30	20		
9FR808	2.00	.50	1.00	*200	150	N	N	N	1,000	1.5	N	5	10	10	50	
9WR22	3.00	*70	*70	*300	300	N	N	N	700	<1.0	N	7	<5	N		
1FR501A	15.00	7.00	7.00	*700	2,000	N	N	<10	700	N	N	70	150	5	N	
1FR501C	1.50	.07	*10	*030	200	<.5	N	<10	100	1.5	N	N	N	N	N	
1FR506	15.00	5.00	5.00	*700	2,000	<.5	N	<10	1,500	1.0	N	70	150	70	30	
1FR507	10.00	3.00	1.50	*700	1,500	N	N	<10	1,000	1.0	N	30	200	100	70	
1FR509	5.00	1.50	1.50	*300	1,000	1.0	N	10	3,000	1.5	N	7	20	20	20	
1FR510	7.00	1.50	1.50	*500	1,000	N	N	<10	1,500	<1.0	N	10	<10	5	30	
1FR1059	5.00	1.50	1.50	*500	1,000	N	N	<10	1,500	<1.0	N	15	20	50	N	
9FR856	5.00	1.00	1.00	*500	150	N	N	N	1,000	2.0	N	5	20	10	50	
9FR858	2.00	.50	1.00	*200	500	N	N	N	700	2.0	N	5	10	10	100	
9WR30	7.00	.70	1.50	*300	700	N	N	N	1,500	1.5	N	7	30	<5	20	
1WR327	15.00	3.00	10.00	*700	2,000	N	N	<10	30	N	N	30	150	<5	N	
1WR333	5.00	1.00	1.50	*300	700	N	N	<10	700	<1.0	N	15	<10	10	30	
1WR343A	5.00	.70	.30	*500	300	<.5	N	<10	1,500	1.5	N	<5	50	150	N	
1WR343B	>20.00	.07	.05	*500	500	<200	N	<10	70	1.0	N	15	30	3,000	N	
1WR349	5.00	1.50	1.00	*500	700	N	N	<10	1,500	1.5	N	30	<5	50		

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska—continued

sample	S-MO	S-NB	S-NI	S-PR	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	AA-AU-P
OWR130	N	10	<5	30	N	30	N	300	150	N	30	N	150	<.02
OWR134	N	10	5	70	N	10	10	200	50	N	70	N	100	<.02
OWR141	N	<10	7	70	N	10	10	300	70	N	30	N	200	<.02
1FR848	N	<10	N	30	N	5	N	300	10	N	15	N	300	<.02
1FR852	<5	10	50	N	50	N	1,000	200	N	30	N	<200	150	
1WR307	N	<10	30	50	N	7	N	150	70	N	15	N	100	<.02
Pluton no. 4														
1FR543	N	10	5	70	N	7	10	270	70	N	15	N	200	<.02
Pluton no. 5														
8FR104	50	<10	N	150	N	N	15	15	<10	N	<10	N	15	.06
8CS6	N	10	7	20	N	15	N	700	150	N	20	N	150	<.02
8CS11	N	<10	20	20	N	15	N	700	100	N	20	N	100	<.02
8FR164D1	N	15	7	300	N	<5	N	<100	50	N	<10	N	500	<.02
9FR808	N	10	5	10	N	5	N	500	20	N	10	N	100	.90
9WR22	N	15	N	30	N	10	N	150	50	N	15	N	70	<.02
1FR501A	<5	<10	10	15	N	70	N	500	500	N	30	N	70	<.02
1FR501C	N	<10	<5	50	N	<5	N	<10	<100	10	N	30	N	<.02
1FR506	<5	<10	70	10	N	50	N	1,500	500	N	30	N	70	<.02
1FR507	<5	<10	50	20	N	30	N	700	500	N	30	N	70	<.02
1FR509	N	<10	7	50	N	10	N	1,500	150	N	15	N	150	<.02
1FR510	<5	<10	<5	30	N	15	N	200	150	N	20	N	200	<.02
1FR1059	N	<10	7	<10	N	15	N	700	200	N	15	N	100	<.02
Pluton no. 6														
9FR856	N	10	5	10	N	20	N	700	100	N	20	N	150	<.02
9FR858	N	10	7	20	N	<5	N	700	20	N	10	N	150	<.02
9WR30	<5	15	10	20	N	15	N	1,500	150	N	20	N	70	<.02
1WR327	<5	<10	100	15	N	50	N	300	500	N	30	N	50	<.02
1WR333	N	<10	<5	15	N	7	N	100	150	N	10	N	150	<.02
1WR343A	N	<10	5	50	N	15	N	700	200	N	10	N	150	<.02
1WR343B	10	10	<5	1,500	300	20	N	<100	150	>10,000	10	3,000	70	.25
1WR349	N	<10	<5	50	N	20	N	700	300	N	20	N	200	<.02

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska—continued.

sample	S-FEX	S-MGX	S-CAX	S-TIX	S-MN	S-AG	S-AS	S-B	S-BA	S-BE	S-BI	S-CO	S-CR	S-CU	S-LA
9FR222A	10.00	3.00	3.00	.500	1,500	N	N	10	2,000	<1.0	N	30	70	5	N
0FR2412A	7.00	3.00	3.00	.500	1,500	N	N	<10	1,000	1.0	N	20	50	100	N
0FR244	15.00	7.00	20.00	.700	2,000	N	N	10	150	<1.0	N	30	50	100	N
0FR2551	10.00	5.00	7.00	.700	1,500	N	N	10	500	1.0	N	30	30	5	N
0FR276	1.00	*20	*20	.070	70	N	N	20	1,500	<1.0	N	10	70	N	N
1FR617	7.00	2.00	2.00	.300	1,500	N	N	<10	1,000	<1.0	N	10	10	<5	N
Pluton no. 8 (No data from Pluton no. 7)															
8CS38	3.00	70	70	.15	.200	500	N	N	<10	1,500	1.0	N	<5	7	30
9FR879	10.00	2.00	2.00	.500	1,000	N	N	10	1,000	1.5	N	10	70	10	50
9FR885	10.00	2.00	2.00	.200	1,000	N	N	10	1,000	1.0	N	15	50	20	50
9FR888	10.00	2.00	5.00	.500	1,000	N	N	10	1,000	1.0	N	20	100	70	50
Pluton no. 9															
9FR686	5.00	1.00	1.50	.300	1,500	N	N	15	1,500	1.0	N	10	15	20	20
9FR291	15.00	3.00	3.00	.700	1,500	N	N	15	1,500	<1.0	N	50	150	50	50
9FR482	7.00	2.00	2.00	.200	700	N	N	10	1,000	1.0	N	20	200	70	50
9FR616	15.00	7.00	3.00	.500	1,500	N	N	30	1,500	1.0	N	50	200	70	30
0FR289	10.00	3.00	1.50	1,000	1,500	N	N	15	1,500	1.5	N	30	50	100	50
0FR3146A	15.00	7.00	10.00	1,000	1,500	N	N	20	1,000	1.5	N	30	150	7	<20
Pluton no. 10															
3FR3218	2.00	5.00	10.00	.100	300	N	N	10	100	<1.0	N	20	1,000	10	20
Pluton no. 12 (No data from Pluton no. 11)															
3FR733A	3.00	1.50	2.00	.200	1,000	N	N	<10	2,000	1.5	N	15	15	30	N
3FR733B	3.00	1.50	1.50	.200	1,000	N	N	10	2,000	1.5	N	15	15	20	N
3FR733C	2.00	1.00	1.50	.200	700	N	N	10	2,000	1.5	N	10	10	20	N
Pluton no. 14 (No data from Pluton no. 13)															
0FR469	3.00	1.00	2.00	.200	500	N	N	<10	300	<1.0	N	N	<10	N	N
0FR470	3.00	.70	3.00	.300	700	N	N	10	700	1.0	N	N	<10	N	N
0FR993	7.00	1.50	5.00	.500	1,500	N	N	10	700	<1.0	N	5	30	7	<20
0FR1002	3.00	1.50	>20.00	.150	3,000	N	N	<10	150	<1.0	N	N	<10	<5	<5

Table 3.—Semi-quantitative spectrographic analyses of Mesozoic granitic rocks of Eagle quadrangle, Alaska—continued

sample	S-MO	S-NB	S-NI	S-PR	S-SB	S-SC	S-SN	S-SR	S-V	S-W	S-Y	S-ZN	S-ZR	AA-Al-P
9FR222A	N	<10	30	<10	N	20	N	500	150	N	15	<200	100	<.0?
9FR2412A	N	10	15	20	N	15	N	1,500	300	N	20	N	100	<.02
9FR2444	<5	10	30	20	N	70	N	700	700	N	20	<200	30	<.0?
9FR2551	<5	15	10	<10	N	30	N	700	300	N	20	N	70	<.02
9FR276	N	<10	<5	30	N	N	N	700	30	N	<10	N	70	<.0?
1FR617	<5	<10	<5	30	N	20	N	700	200	N	15	N	20	<.02
Pluton no. 8 (No data from Pluton no. 7)														
8CS38	N	10	<5	15	N	7	N	300	50	N	10	N	100	<.02
9FR879	N	10	15	N	N	50	N	700	200	N	20	N	30	<.02
9FR885	N	10	15	10	N	30	N	700	200	N	20	N	30	<.02
9FR888	N	10	15	10	N	30	N	1,000	200	N	20	N	30	<.02
9FR686	<5	10	20	20	N	15	N	300	100	N	20	N	100	<.02
9FR291	<5	15	50	30	N	30	N	1,000	300	N	30	N	150	<.02
9FR482	N	10	20	50	N	200	N	700	500	N	20	N	70	<.02
9FR616	<5	10	50	30	N	30	N	1,000	300	N	20	N	70	<.02
9FR289	N	15	5	50	N	20	N	700	300	N	30	N	300	<.02
9FR3146A	<5	10	50	<10	N	30	N	700	300	N	30	N	150	<.02
Pluton no. 9														
3FR3218	N	30	300	10	N	30	<10	100	150	N	20	N	200	N
Pluton no. 10														
3FR733A	N	<20	5	15	N	15	N	1,000	150	N	20	N	100	N
3FR733B	N	<20	5	15	N	15	N	1,000	150	N	20	N	100	N
3FR733C	N	N	5	20	N	10	N	1,000	100	N	15	N	50	N
Pluton no. 12														
9FR469	N	<10	5	N	N	<5	N	300	70	N	<10	N	70	<.02
9FR470	N	<10	5	<10	N	5	N	1,000	70	N	<10	N	70	<.02
9FR993	<5	10	5	<10	N	5	N	700	150	N	15	N	200	<.02
9FR1002	N	<10	<5	N	N	7	N	700	70	N	30	N	70	<.02
Pluton no. 14														